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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,640	08/15/2001	Andre M. E. Nel	10001090-1	1838

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EXAMINER

STERRETT, JONATHAN G

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/930,640	Applicant(s) NEL, ANDRE M. E.	
	Examiner Jonathan G. Sterrett	Art Unit 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

1. This **Non-final Office Action** is responsive to applicant's amendment filed November 4, 2005. Currently **Claims 1-24** are pending.

Response to Amendments

2. The rejection of Claims under USC 101 is withdrawn. The objection to the Abstract is withdrawn.

Response to Arguments

3. The applicant's arguments regarding Claims 1, 8 and 9 are moot in view of new grounds of rejection.
4. The applicant's remaining arguments have been fully considered, but they are not persuasive.
5. The applicant argues that Gaspard does not teach a portable device as cited by the preamble of Claim 18.

The examiner respectfully disagrees.

6. In response to applicant's arguments, the recitation "a portable device" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the

Art Unit: 3623

claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, Gaspard's invention is portable to the same extent as is claimed in Claim 18 because the limitations cited by the body of claim 18 are fully met by Gaspard as is noted in the office action.

7. The applicant argues that Gaspard does not teach obtaining position information, route information and excess capacity information **from** a mobile carrier entity.

The examiner respectfully disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "from a mobile carrier entity") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claim cites that position information, route information and excess capacity information is obtained **for** a mobile carrier entity.

8. The applicant argues that Gaspard and the Official Notice do not meet the limitations of Claim 18.

The examiner respectfully disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

9. The applicant argues that there is no motivation to combine Gaspard and the Official Notice to meet the limitations of Claim 18.

The examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gaspard teaches the necessity of obtaining position information, route information and excess capacity information to perform real time scheduling based on capacity, route and position information (a GPS locator is identified with the vehicle in Figure 1 #170 & paragraph 38; excess capacity information – paragraph 13 and paragraph 42; route information – also paragraph 42 – note the route planning algorithm mentioned). Gaspard teaches that although remote areas cannot be profitably served with traditional fixed logistics

Art Unit: 3623

schedules, that there still is a need to provide passenger and freight service to areas that are not frequently traveled. The need to dynamically schedule service to those areas by providing routing, position and excess freight capacity can enable a profitable service to be provided. As noted in the office action, Gaspard does not teach the use of a scanner to input data into the system, including position, location and excess capacity information. However, as noted above, Gaspard teaches the need to obtain and use this information. The Official Notice provides the basis for incorporating what is well known in the logistics art of using an optical scanner to enter information into the system. The motivation to combine is the fact that scanning is a simple and quick way of entering data into the system to ensure accurate data. The combination of Gaspard with the Official Notice combines the need for the types of information cited in the limitation with the reasonable expectation of success that said information would be simply and more accurately entered into the system. One of ordinary skill in the art of logistics and logistics planning would find it obvious to combine the teachings of Gaspard and the Official Notice.

10. The applicant has attempted to challenge the examiner's taking of Official Notice on page 14 line 1-6; however, applicant has not provided adequate information or argument so that *on its face* it creates a reasonable doubt regarding the circumstances justifying Official Notice. Therefor, the presentation of a reference to substantiate the Official Notice is not deemed necessary. The examiner's taking of Official Notice has been maintained.

In support of Official Notice, the applicant is referred to the following reference is provided: Nehls, Carl, "Custodial Package Tracking at Federal Express", 1988, National Academy of Engineering, books.nap.edu/books/030903891X/html/57.html, pp.57-81.

11. The applicant argues that the controller cited in Gaspard can not meet the limitations of Claim 18.

The examiner respectfully disagrees. As noted above, limitations in the preamble are not given patentable weight. Also, Gaspard's controller is connected to the devices as shown in Figure 1 and as is cited in the claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 1-6, 10-14, 16, 17 and 21-24** are rejected under under 35 U.S.C. 103(a) as being unpatentable over **Gaspard, II US 2002/0055818** (hereinafter **Gaspard**).

Regarding **Claim 1**, Gaspard teaches:

receiving from one or more users respective capacity attributes, including position information, route information and excess capacity information specifying available freight-hauling capacity, for each mobile carrier entity in a set of freight-hauling mobile carrier entities;

Paragraph 38 line 2-4, GPS data (i.e. position information) transmitted from each vehicle (i.e. each mobile carrier entity) is received by the host computer.

Paragraph 42 line 1-4, route information is retrieved (i.e. received) from database of available vehicles and the routes where they are located.

Paragraph 60 line 2-4, freight requirements for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request (and passenger requests from individual terminals) can be fulfilled and how it can be fulfilled. The scheduling function as described receives available freight hauling capacity in order to schedule the routes. Gaspard's invention fulfills freight transport requests for a set of mobile entities –see paragraph 42 line 4).

computing a projection of available carrier capacity based upon the received mobile carrier capacity attributes; and

Paragraph 43 line 1-6, arrival and departure times are predicted (i.e. computed) based on the information received from the mobile carrier capacity attributes.

identifying one or more freight haulage job candidates from the set of mobile carrier entities based upon the computed projection of available carrier capacity and shipping attributes for each of a set of freight haulage jobs.

Paragraph 42 line 22-26, more than one current schedule (i.e. current route of a mobile carrier) is examined to determine if the freight request can be handled (i.e. identifying one or more freight haulage candidates based on whether the freight can be handled according to capacity and delivery requirements (i.e. based on computed projections of available carrier capacity and shipping attributes).

Gaspard does not teach:

receiving from one or more users respective capacity attributes, including excess capacity information specifying available freight-hauling capacity.

Gaspard's teaching infers the excess capacity information based on passenger terminal inputs (i.e. requests for pickup) and known vehicle capacity.

The examiner takes Official Notice that receiving from one or more users capacity information specifying available freight-hauling capacity is old and well known in the art. An example of this is logistics dispatchers who receive excess capacity information via radio from delivery drivers in order to more efficiently schedule routes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding receiving capacity and position attributes from and for mobile carrier entities, to include the step of receiving excess capacity information, because it would enable more efficient scheduling for the mobile carrier entities.

Regarding **Claim 2**, Gaspard teaches:

wherein computing the projection of available carrier capacity comprises estimating future positions of one or more of the mobile carrier entities.

Paragraph 43 line 1-2, the host computer computes projections of available capacity by predicting arrival and departure time at a location (i.e. estimating future positions) for a candidate mobile carrier.

Regarding **Claim 3**, Gaspard teaches:

wherein future positions of one or more of the mobile carrier entities are estimated at one or more times within pickup time windows specified for each of the freight haulage jobs.

Paragraph 49 line 14-16, arrival and departure times are estimated for a mobile carrier. The arrival and departure times comprise a pickup time window for each of the freight haulage jobs.

Paragraph 44 line 11-15, the estimation of pickup and delivery times (i.e. pickup window) is done several times during the movement of the vehicle to the destination.

Regarding **Claim 4**, Gaspard teaches:

wherein future positions of one or more of the mobile carrier entities are estimated based at least in part upon current transport condition information.

Paragraph 44 line 14-16, future positions (i.e. pickup and delivery stops) are estimated based on actual performance of the vehicle (i.e. transport condition information).

Regarding **Claim 5**, Gaspard teaches:

wherein the freight haulage job candidates are identified based at least in part upon the proximity of the estimated mobile carrier entity positions to pickup locations specified for each of the freight haulage jobs.

Paragraph 42 line 22-26, the determination of candidates is based on their ability to meet the transportation request, i.e. freight requirements including capacity and timing. The timing is determined by their proximity to pickup based on estimated routing information.

Regarding **Claim 6**, Gaspard teaches:

wherein the received excess capacity information includes amount of available capacity and mode of transport.

Paragraph 60 line 2-4, available capacity is determined by amount of freight space available in terms of volume and weight (i.e. available capacity).

Paragraph 34 line 3-6, various modes of transport (air, vehicle, marine) can be used in scheduling the excess capacity.

Regarding **Claim 8**, Gaspard teaches:

computing an amount of capacity available on a given mobile carrier entity based upon excess capacity information received from the given mobile carrier entity.

Paragraph 60 line 1-2, transportation freight requirements are evaluated (i.e. computed) against available capacity (volume and weight) to determine if the load can be carried by the mobile carrier in question.

Gaspard does not teach where the excess capacity information is received from the given mobile carrier entity.

The examiner takes Official Notice that receiving from a mobile carrier entity capacity information specifying available freight-hauling capacity is old and well known in the art. An example of this are logistics dispatchers who receive excess capacity information via radio from delivery drivers in order to more efficiently schedule routes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding computing excess capacity information for mobile carrier entities, to include the step of receiving excess capacity information from that mobile carrier entity, because it would enable more efficient scheduling for the mobile carrier entities.

Regarding **Claim 9**, Gaspard teaches:

wherein the excess capacity information received from the given mobile carrier entity includes maximum volume information and maximum weight haulable by the given mobile carrier entity and volume information and weight for each item of freight being hauled by the given mobile carrier entity.

Paragraph 60 line 2-4, freight requirements of volume and weight for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request can be fulfilled for a given mobile carrier entity.

Paragraph 41, cube and weight requirements required by mobile carrier entity in weight request.

Gaspard does not teach where the excess capacity information is received from the given mobile carrier entity.

The examiner takes Official Notice that receiving from a mobile carrier entity capacity information specifying available freight-hauling capacity is old and well known in the art. An example of this are logistics dispatchers who receive excess capacity information via radio from delivery drivers in order to more efficiently schedule routes.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding receiving cube and weight information for mobile carrier entities, to include the step of receiving excess capacity

information from that mobile carrier entity, because it would enable more efficient scheduling for the mobile carrier entities.

Claims 10-14 and 16-17 recite similar limitations as those recited in **Claims 1-6, 8 and 9** above, and are therefore rejected under the same rationale.

Regarding **Claim 21**, Gaspard does not teach:

Wherein the receiving comprises prompting the one or more users to enter the respective capacity attributes.

Official Notice is taken that prompting a user to enter information, including excess capacity information, is old and well known in the art of computers. This provides an easy to use interface to enter data into a computer system.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding receiving cube and weight information for mobile carrier entities, to include the step of prompting the user to enter the capacity information, because it would provide an easy way to enter data into a computer system.

Regarding **Claim 22**, Gaspard teaches:

selecting one of the identified freight haulage job candidates to perform a particular one of the freight haulage jobs.

Paragraph 42, a candidate is selected of available candidates to carry the freight.

Regarding **Claim 23**, Gaspard does not teach:

receiving haulage rates from the identified freight haulage job candidates, wherein the selecting is based at least in part on the received haulage rates.

Official Notice is taken that selecting a carrier based on a received rate quote is old and well known in the 3pl art. This ensures the most competitive rate is achieved to save money in carrying freight.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding receiving cube and weight information for mobile carrier entities, to include the step of receiving rate information and selecting a carrier based on the rate information, because it would save money in transporting a particular freight haulage job.

Regarding **Claim 24**, Gaspard teaches:

wherein the excess capacity information is expressed in terms of volume and weight available on respective ones of the mobile carrier entities.

Paragraph 39, volume and weight of package pickup (i.e. excess capacity information) is requested. The scheduling algorithm must take the cube and weight information into account to be able to schedule the request –see para 42, available vehicles scheduled are those that can carry the requested freight.

14. **Claims 7, 15 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gaspard, II US 2002/0055818** (hereinafter **Gaspard**).

Regarding **Claim 7**, Gaspard teaches:

wherein the freight haulage job candidates are identified based at least in part upon a comparison of the received excess capacity information and an amount of needed capacity specified for each of the freight haulage jobs.

Paragraph 60 line 2-4, freight requirements of volume and weight for a freight transport request (i.e. excess capacity information) are received from the database to determine if a freight transport request can be fulfilled and how it can be fulfilled for a given mobile carrier entity.

Paragraph 43 line 1-6, arrival and departure time predictions are used to determine if a mobile carrier entity can be scheduled to handle the particular freight.

Gaspard does not teach:

wherein the freight haulage job candidates are identified based at least in part upon mode of transport specified for each of the freight haulage jobs.

Official Notice is taken that it is old and well known in the art of logistics to identify freight haulage job candidates based in part upon mode of transport specified for a freight haulage job. For example, if a mode of transport specified is by air, then the job candidate would be an airline and not a railroad. If mode of transport is specified by marine vessel, then a railroad freight haulage candidate would not be selected.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard, regarding selecting a freight haulage candidate based on their excess capacity and predicted arrival at a location, to include the step of identifying a freight haulage candidate based on mode of transport specified for a freight haulage job, to ensure that the mode of transport requirement was met in providing transportation for the freight haulage job.

Claim 15 recites similar limitations as those recited in **Claim 7** above, and is therefore rejected under the same rationale.

Regarding **Claim 18**, Gaspard teaches:

A memory;

Paragraph 37 line 3, each terminal has memory.

A wireless transceiver;

Paragraph 37 line 6, any type of terminal can be used, including cellular telephones (i.e. wireless transceiver).

A positioner operable to compute position information;

Paragraph 38, GPS computes position information.

A controller coupled to the memory, the wireless transceiver, the positioner, and the scanner and operable to obtain from the scanner capacity attributes, including position information, route information and excess capacity information,

Figure 1 #140 and paragraph 35 line 1-5, the host computer is connected over the network (see paragraph 36, network can be wireless, e.g. cellular phones) to memory, the positioner and is operable to obtain the position, route and excess capacity information from a mobile carrier – see paragraph 38 line 2-6)

for a mobile carrier entity and to control wireless transmission of the capacity attributes through the wireless transceiver in accordance with a mobile wireless communication protocol.

Paragraph 37, the terminals (including wireless devices – see line 6) communicate over and network and thus transmit in accordance with a mobile wireless communication protocol.

Gaspard does not teach:

A scanner operable to direct a light beam at a symbol and to recover information embedded in the symbol based on detected reflections from the symbol.

The examiner takes official notice that bar code scanners which recover information from symbols based on detected reflections from the symbol are old and well known in the art of logistics as a way to quickly and accurately obtain information from a shipping package.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gaspard regarding providing a system for scheduling capacity information on mobile carriers with excess capacity, to include the step of entering information into the system using a bar code scanner, because it would simplify and make more accurate the entering of logistic information into the system.

Regarding **Claim 19**, Gaspard teaches:

Wherein the positioner comprises a GPS receiver,

Figure 1 #170, GPS receiver – also see paragraph 38 line 3.

Claim 20 recites similar limitations as those recited in **Claim 9** above, and is therefore rejected under the same rationale.

Conclusion

15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 571-272-6881. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 3623

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

JGS 1-3-2006


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